

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

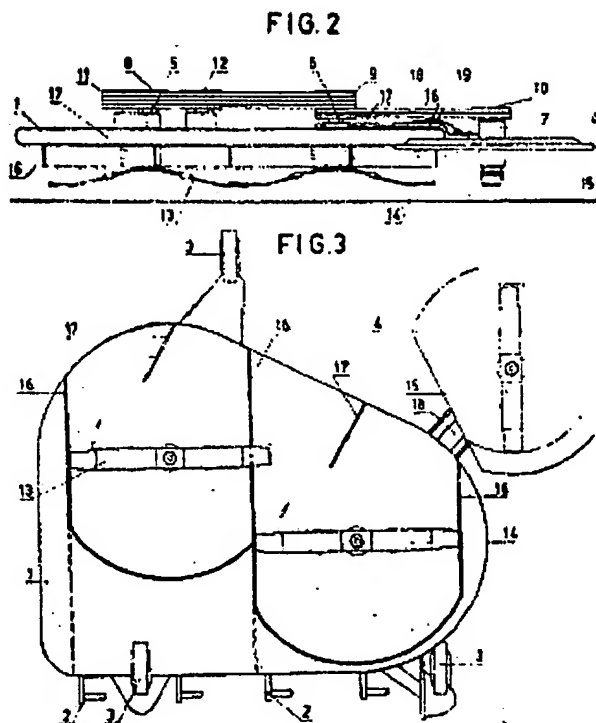
**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

Improvements relating to a mower having two or more rotating cutters

Patent number: GB966347.
Publication date: 1964-08-12
Inventor:
Applicant: STICHTING INST VOOR TUINBOUWTE
Classification:
- International:
- european: A01D34/66C
Application number: GB19630001226 19630110
Priority number(s): NL19620273380 19620110

Abstract of GB966347

966,347. Rotary-scythe mowers. STICHTING INSTITUUT VOOR TUINBOUWTECH- NIEK. Jan. 10, 1963 [Jan. 10, 1962], No. 1226/63. Heading A1F. In a rotary-scythe mower having two or more rotors 13, 14 there are provided guiding strips 16 for the cut crop, these strips being located just above and parallel to the plane of rotation of the rotors, the strips extending longitudinally and symmetrically with respect to the rotors so that the rotor-shafts 5, 6 are mid-way between them. At the front the strips may be bent around to join one another and at the rear they are supplemented by intermediately arranged strips 17 which may be of adjustable inclination. A third rotor 15 is mounted on a spring-loaded pivoted arm 18 and is surmounted by its own guard 4.



Data supplied from the *esp@cenet* database - Worldwide

Improvements relating to a mower having two or more rotating cutters

Description of GB966347

COMPLETE SPECIFICATION

DRAWINGS ATTACHED

Improvements relating to a Mower having Two or More Rotating Cutters

We, STICHTING INSTITUT VOOR TUIBOUWTECHNIEK, a foundation, being a body corporate duly organised and existing under the laws of The Netherlands, of 12 Koningskade, The Hague, The Netherlands, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:- The invention relates to a rotary scythe mower.

Such mowers are generally known and are especially intended for cutting grass and weeds and for pulverising fallen leaves and twigs on large areas, such as lawns, roadsides, or orchards. The mower is provided with a swinging cutting disk for mowing orchards.

It is an object of the invention to provide a way of spreading the cut and pulverised material over the surface of the ground.

With known rotary scythe mowers it is impossible to obtain a sufficiently even spreading, because the grass or weeds are mostly laid down in swaths.

Further nearly all rotary scythe mowers having two or more cutters have the drawback that the material which is cut, is, owing to the centrifugal force, thrown from one cutter on to the other, and can cling to the cutters to cause an accumulation of material, which has the result that the same material is cut several times, so that a high-powered driving mechanism is required for a good functioning of the mower.

The rotary scythe mower according to the present invention completely overcomes these drawbacks because the cut material cannot be thrown from one cutter on to the other and because an adequate spreading is guaranteed under all circumstances.

According to the present invention, there is provided a rotary scythe mower having two or more cutters and provided, in the driving direction of the mower and at both sides of the cutters and just above and parallel to their planes of rotation, with mutually parallel or substantially mutually parallel guiding strips from the grass or weeds which have been cut.

The purpose of the guiding strips is to prevent the cut grass or weeds from being thrown from one cutter on to the other and at the same time to lead the grass or weeds to the rear of the mower, so that a more even spreading is obtained.

According to another feature of the invention the guiding strips are bent at the front along the circle of rotation of a cutter.

When the guiding strips have this bend at the front, the leading is even more supple and at the same time the cut plants are prevented from being thrown on to the plants which are still to be cut.

It is self-evident that the front parts having this bend can be so far extended that two successive guiding strips are connected with one another. The spreading of the cut grass or weeds can become even more intensive, if a short guiding strip is provided at the rear substantially in the centre of discharge channels formed by the guiding strips. This has the advantage that the discharged material spreads fanwise whilst any material that may still be clinging to the cutters is stopped and discharged by the short guiding strip.

It is another feature of the invention that there is provided, at the rear and substantially centrally between each successive pair of guiding strips, a short guiding strip which extends partly above the cutters. These short guiding strips are adjustable.

The accompanying drawing illustrates, by way of example, a rotary scythe mower having two cutters and a swinging cutter with a guard. In this drawing:

Figure 1 is a top view of the mower.

Figure 2 is a rear view, a rearmost runner being omitted.

Figure 3 is a bottom view.

The mower illustrated has a carrier frame 1 which is made of steel tubing and/or of shaped steel sections. Hooks 2 and runners 3 are provided on the carrier frame in a conventional way. Cutters 13, 14 and 15 are provided on the lower side of the cutter shafts 5, 6 and 7. The mower has a guard 4 for the cutter 15, the guard and cutter being carried by an arm 18 which can pivot around the shaft 6 and is held in position by a spring 19. Pulleys 8, 9 and 10 are provided on shafts 5, 6 and 7 and are driven through v-belts by means of a driving disk 11 and are kept under tension by a tension pulley 12~

Just above the plane of rotation of the cutters 13 and 14, mutually parallel guiding strips 16 are provided in the driving direction of the mower. These guiding strips are bent along the circle of rotation of the cutter and interconnected at the front.

However, the guiding strips can also run straight, as indicated by dotted lines in Figure 3. Further, they may have any bend which is desirable and which promotes the discharge of the cut grass or weeds at the front side, within planes limited by the filled up and dotted guiding strips.

Short guiding strips 17 promote the spreading and clean the cutters. These can be constructed in such a way that the angle of discharge is adjustable.

Data supplied from the *esp@cenet* database - Worldwide

Improvements relating to a mower having two or more rotating cutters

Claims of **GB966347**

WHAT WE CLAIM IS:-

1. A rotary scythe mower having two or more cutters and provided, in the driving direction of the mower and at both sides of the cutters and just above and parallel to their planes of rotation, with mutually parallel or substantially mutually parallel guiding strips for the grass or weeds which have been cut.
2. A rotary scythe mower according to claim 1, wherein the guiding strips are bent at the front and substantially along the circle of rotation of a cutter.
3. A rotary scythe mower according to claims 1 and 2, wherein each pair of successive guiding strips are connected with one another.
4. A rotary scythe mower according to any of claims 1, 2 or 3, wherein at the rear, and substantially in the centre between each pair of successive guiding strips, there is provided a short guiding strip, which extends as far as above the cutters.
5. A rotary scythe mower according to claim 4, wherein the short guiding strip is adjustable.
6. A rotary scythe mower substantially as described with reference to the accompanying drawings.

Data supplied from the **esp@cenet** database - Worldwide